HSAG HEALTH SERVICES ADVISORY GROUP

APPENDIX D: **The Child and Adolescent Mental Health Division's 2005-2006 Submitted Study:**
Congruence of Coordinated Service Plans and Mental Health Treatment Plans

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans
Activity I: Select the Study Topic(s)

A. Step One: Choose the Selected Study Topic. Topics selected for study should reflect the Medicaid enrollment in terms of demographic characteristics, prevalence of disease, and the potential consequences (risks) of the disease. Topics could also address the need for a specific service. The goal of the project should be to improve processes and outcomes of health care. The topic may be specified by the State Medicaid agency or on the basis of Medicaid enrollee input.

Study Topic:

The Coordinated Service Plan (CSP) document provides a central tool for organizing the provision of services across child serving agencies, contracted providers, and families. The CSP is designed to be a central reference point in the development of specific Mental Health Treatment Plans (MHTP) by each specific provider. Review of the CSP and MHTP by treatment teams ensures that the services procured and provided by separate individuals and institutions collectively address the broad needs and goals for the child's treatment. Each child is expected to have a CSP within 30 days of registration that is revised on an annual basis and reviewed for update on at least a semiannual basis or whenever clinically relevant.

The Hawaii Child and Adolescent Mental Health Division (CAMHD) has implemented a multiyear quality improvement initiative related to CSP timeliness and quality. A performance improvement project was completed in 2003 that demonstrated significant improvements had been achieved in the timely completion of CSPs. To assure that increased timeliness does not result in decreased quality, routine performance measures of CSP timeliness and CSP quality have been implemented and monitored for the past three years. Both the timeliness and quality indicators have demonstrated sustained performance improvement and have exceeded their performance targets over the past year as described in the Integrated Performance Monitoring Reports (Hawaii Departments of Education and Health, 2005).

Another relevant CAMHD initiative has focused on expanding the measurement of provider practices through the development and use of the Monthly Treatment and Progress Summary (MTPS). This instrument asks providers to report on the specific treatment settings, formats, targets, and practices employed in a youth's treatment during the calendar month. The code set used for this measure was also employed by the CAMHD Evidence-Based Services (EBS) Committee to code the empirically supported treatments identified in the research literature. The application of these code sets to mental health assessment and treatment-planning documents creates the potential for understanding the congruence and divergence of treatment information across the communication channels between the numerous actors in the child's care.

Upon review of this information the CAMHD Quality of Care Studies task force, recommended that the next step in quality development for the CSP process is to examine the degree to which the timely and high quality CSPs play a role in coordinating the

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans

planning for services by individual provider agencies. This recommendation was reviewed and approved by the Performance Improvement Steering Committee (PISC) and the Executive Management Team (EMT) for implementation as a service-related quality of care study for calendar year 2005. Due to an expressed interest in this topic, a collaborative study implementation workgroup was established that included personnel from CAMHD and the University of Hawaii (UH) Department of Psychology.

The implementation workgroup proposed a two-phase study with the first phase being a study of the inter-rater reliability of the code set when applied to the treatment plan documents. The first phase of this study found acceptable reliability, so the second phase was also conducted to examine the degree of congruence between the CSPs and the MHTPs with respect to the treatment targets and treatment practices coded. Because a coding system for this application did not exist prior to 2005 and because the reliability of the system to be developed was unknown at the initiation of this project, the quality improvement intervention for 2005 was the establishment a reliable system for coding CSPs and MHTPs with respect to their targets and practices. Because the system was found to have adequate reliability, the baseline measure of the congruence of these plans is also reported below. Greater congruence of these plans serves as an indicator of the degree of coordination in the planning of care for youth.

The interventions to improve the congruence of these plans in future years will include 1) focused feedback to care coordinators, supervisors and providers on the results of this study, 2) a focus group with these role groups to solicit strategies to improve congruence at the field level, 3) selection of strategies based on the focus group results, and 4) systematic feedback to the role groups on future measurements in order to provide feedback on the most current performance data regarding congruence.

B. Step Two: The Study Question. Stating the question(s) helps maintain the focus of the PIP and sets the framework for data collection, analysis, and interpretation.

Study Question:

Question #1. Can the code set used for the MTPS and the EBS analysis, be implemented for reviewing CSPs and MHTPs with an acceptable degree of inter-rater reliability?

Question #2: What is the degree of congruence between the targets and practices described in the CSP with the targets and practices described in the MHTPs.

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans

C. Step Three: Selected Study Indicators. A study indicator is a quantitative or qualitative characteristic or variable that reflects a discrete event (e.g., an older adult has not received a flu shot in the last twelve months), or a status (e.g., a member's blood pressure is/is not below a specified level) that is to be measured. The selected indicators should track performance or improvement over time. The indicators should be objective, clearly and unambiguously defined, and based on current clinical knowledge or health services research.

Study Indicator #1:	Intraclass Correlation Coefficient (Model 2, 1) for Treatment Targets for Coordinated Service Plans
Numerator:	Unique Coding Target Variance
Denominator:	Total Variance due to Treatment Targets, Judges, and Judge by Treatment Target Interaction
First Measurement Period Dates:	January 1 to December 31, 2005
Baseline Benchmark:	.70
Source of Benchmark:	Rationally Selected
Baseline Goal:	
Study Indicator #2:	Intraclass Correlation Coefficient (Model 2, 1) for Treatment Targets for Mental Health Treatment Plans
Numerator:	Unique Coding Target Variance
Denominator:	Total Variance due to Treatment Targets, Judges, and Judge by Treatment Target Interaction
First Measurement Period Dates:	January 1 to December 31, 2005
Baseline Benchmark:	.70
Source of Benchmark:	Rationally Selected
Baseline Goal:	
Study Indicator #3:	Intraclass Correlation Coefficient (Model 2, 1) for Treatment Practices for Coordinated Service Plans
Numerator:	Unique Coding Target Variance
Denominator:	Total Variance due to Treatment Practices, Judges, and Judge by Treatment Practice Interaction
First Measurement Period Dates:	January 1 to December 31, 2005
Benchmark:	.70
Source of Benchmark:	Rationally Selected
Baseline Goal:	

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans	
Study Indicator #4:	Intraclass Correlation Coefficient (Model 2, 1) for Treatment Practices for Mental Health Treatment Plans
Numerator:	Unique Coding Target Variance
Denominator:	Total Variance due to Treatment Practices, Judges, and Judge by Treatment Practice Interaction
First Measurement Period Dates:	January 1 to December 31, 2005
Benchmark:	.70
Source of Benchmark:	Rationally Selected
Baseline Goal:	
Study Indicator #5:	Congruence Between Treatment Targets on Coordinated Service Plans and Mental Health Treatment Plans (i.e., Conditional probability that a treatment target was included in an MHTP given that it was included in the CSP)
Numerator:	Number of Treatment Targets Present on Both Coordinated Service Plan and Mental Health Treatment Plan
Denominator:	Number of Treatment Targets Present on the Coordinated Service Plan
First Measurement Period Dates:	January 1 to December 31, 2005
Benchmark:	.50
Source of Benchmark:	Rationally Selected
Baseline Goal:	
Study Indicator #6:	Congruence Between Treatment Practices on Coordinated Service Plans and Mental Health Treatment Plans (i.e., Conditional probability that a treatment practice was included in an MHTP given that it was included in the CSP)
Numerator:	Number of Treatment Practices Present on Both Coordinated Service Plan and Mental Health Treatment Plan
Denominator:	Number of Treatment Practices Present on the Coordinated Service Plan
First Measurement Period Dates:	January 1 to December 31, 2005
Benchmark:	.50
Source of Benchmark:	Rationally Selected
Baseline Goal:	

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans

D. Step 4: Identified Study Population. The selected topic should represent the entire Medicaid enrolled population with system-wide measurement and improvement efforts to which the PIP study indicators apply. Once the population is identified, a decision must be made whether to review data for the entire population or a sample of that population.

Identified Study Population:

The identified population will be all youth who were admitted to CAMHD for services between July 1, 2003 and June 30, 2004, and for whom at least one Coordinated Service Plan and at least one Mental Health Treatment Plan were available. All treatment documents developed within the first six months following admission will be considered and the first CSP and all of its associated MHTPs during the six-month period following admission will be selected for coding and analysis. This population includes both QUEST and non-QUEST youth, but the results from the QUEST population are reported here with descriptive statements about the generality of findings to the total population.

E. Step 5: Sampling Methods. If sampling is to be used to select members of the study, proper sampling techniques are necessary to provide valid and reliable information on the quality of care provided. The true prevalence or incidence rate for the event in the population may not be known for the first time a topic is studied.

Measure	Sample Size	Population	Method for Determining Size (*describe*)	Sampling Method (*describe*)
Intraclass Correlation Coefficient (Model 2, 1) for Treatment Targets for Coordinated Service Plans	103 Youth Total Sample 47 Youth QUEST Sample	561 Youth Effect size conventions were used for estimating needed sample size (Small Effect: f^2 = .02; Medium Effect Effect: f^2 = .15; Large Effect: f^2 = .35)	ICCs are based on a 2-Factor Judge by Coding Target Analysis of Variance: Power Analysis at alpha = .05, power $(1 - \beta)$ = .80, for small-medium effect size (f^2 = .08; $sR^2 \sim .05$) for coding target effect (df = 1).	Simple Random Sampling of Cases
Intraclass Correlation Coefficient (Model 2, 1) for Treatment Targets for Mental Health Plans	103 Youth Total Sample 47 Youth QUEST Sample Multiple Documents per Youth was Possible, so final document samples were: 108 Total Sample 49 QUEST Sample	561 Youth Effect size conventions were used for estimating needed sample size (Small Effect: f^2 = .02; Medium Effect Effect: f^2 = .15; Large Effect: f^2 = .35)	ICCs are based on a 2-Factor Judge by Coding Target Analysis of Variance: Power Analysis at alpha = .05, power $(1 - \beta)$ = .80, for small-medium effect size (f^2 = .08; $sR^2 \sim .05$) for coding target effect (df = 1).	Simple Random Sampling of Cases

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans				
Measure	**Sample Size**	**Population**	**Method for Determining Size (*describe*)**	**Sampling Method (*describe*)**
Intraclass Correlation Coefficient (Model 2, 1) for Treatment Practices for Coordinated Service Plans	103 Youth Total Sample 47 Youth QUEST Sample	561 Youth Effect size conventions were used for estimating needed sample size (Small Effect: f^2 = .02; Medium Effect Effect: f^2 = .15; Large Effect: f^2 = .35)	ICCs are based on a 2-Factor Judge by Coding Target Analysis of Variance: Power Analysis at alpha = .05, power $(1 - \beta)$ = .80, for small-medium effect size (f^2 = .08; sR^2 ~ .05) for coding target effect (df = 1).	Simple Random Sampling of Cases
Intraclass Correlation Coefficient (Model 2, 1) for Treatment Practices for Mental Health Treatment Plans	103 Youth Total Sample 47 Youth QUEST Sample Multiple Documents per Youth was Possible, so final document samples were: 108 Total Sample 49 QUEST Sample	561 Youth Effect size conventions were used for estimating needed sample size (Small Effect: f^2 = .02; Medium Effect Effect: f^2 = .15; Large Effect: f^2 = .35)	ICCs are based on a 2-Factor Judge by Coding Target Analysis of Variance: Power Analysis at alpha = .05, power $(1 - \beta)$ = .80, for small-medium effect size (f^2 = .08; sR^2 ~ .05) for coding target effect (df = 1).	Simple Random Sampling of Cases
Conditional probability that a treatment target was included in a Mental Health Treatment Plan given that it was included in the Coordinated Service Plan	103 Youth Total Sample 47 Youth QUEST Sample	561 Youth	Used ICC Sample	Simple Random Sampling of Cases
Conditional probability that a treatment practice was included in a Mental Health Treatment Plan given that it was included in the Coordinated Service Plan	103 Youth Total Sample 47 Youth QUEST Sample	561 Youth	Used ICC Sample	Simple Random Sampling of Cases

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans

F. Step 6: Data Collection Procedures. Data collection must ensure that the data collected on the PIP indicators are valid and reliable. Validity is an indication of the accuracy of the information obtained. Reliability is an indication of the repeatability or reproducibility of a measurement.

[X] Clear identification of the data to be collected
[X] Identification of the data sources and how and when the baseline and repeat indicator data will be collected
[X] Specification of who will collect the data
[X] Identification of instruments used to collect the data
[   ] Medical/treatment records
[   ] Administrative data:
[   ] Claims/encounter data   [   ] Complaints [   ] Appeals   [   ] Telephone service data   [   ] Appointment/access data
[X] Hybrid (medical/treatment records and administrative)
[   ] Pharmacy data
[   ] Survey data (attach the survey tool and the complete survey protocol)
[   ] Other (list and describe):

If medical/treatment records, check below:
  [X] Medical/treatment record abstraction

If survey, check all that apply:
  [   ] Personal interview
  [   ] Mail
  [   ] Phone with CATI script
  [   ] Phone with IVR
  [   ] Internet
  [   ] Incentive provided
  [   ] Other (list and describe):

If administrative, check all that apply:
  [   ] Programmed pull from claims/encounter files of all eligible members
  [   ] Programmed pull from claims/encounter files of a sample of members
  [   ] Complaint/appeal data by reason codes
  [   ] Pharmacy data
  [   ] Delegated entity data
  [   ] Vendor file
  [   ] Automated response time file from call center
  [   ] Appointment/access data
  [X] Other (list and describe):

Enrollment information to identify first episodes during period.

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans	
F. Step 6a: Data Collection Cycle.	**Data Analysis Cycle.**
[X] Once a year [ ] Twice a year [ ] Once a season [ ] Once a quarter [ ] Once a month [ ] Once a week [ ] Once a day [ ] Continuous [ ] Other (list and describe):	[X] Once a year [ ] Once a season [ ] Once a quarter [ ] Once a month [ ] Continuous [ ] Other (list and describe):

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans

F. Step 6b. Other Pertinent Methodological Features. Complete only if needed.

The coding system used was the same as that for the MTPS and EBS projects, but some additional code refinements were performed based on the open-ended responses received from providers on the MTPS. In addition to the service plan coding, other treatment records and administrative data were collected to identify the youth's diagnosis (to support matching to the EBS review) and relevant contextual information, but were not reported here. Two judges coded each record. Although it was originally intended that one judge was a staff member from the youth's Family Guidance Center (FGC) and the other will be a research and evaluation team member. Due to FGC staff vacancies and resource limitations, an additional research and evaluation team member served as the first judge for a subset of the FGC assigned records. The coding of CSPs and MHTPs was randomized to control for order of presentation effects. To control for the effects of repeated planning, only the first CSP completed during the youth's service episode was coded. All cases selected based on simple random selection were coded regardless of the youth's characteristics (e.g., diagnosis, QUEST eligibility, etc.) and service provider's characteristics. Randomization was used to help prevent these characteristics from introducing systematic bias into the study.

Eleven coders will be recruited including three graduate assistants (GAs) from University of Hawaii at Manoa and eight participants from CAMHD's regional Family Guidance Centers (FGCs). CAMHD participants represented a range of diversity in the level of education and professional status including Quality Assurance Specialists, Mental Health Supervisors, a Clinical Psychologist, and a Branch Chief. The three GA participants included two doctoral candidates and a master's level psychology student enrolled in a doctoral program. Coders received several hours of training and practice prior to data collection. Before the training event, participants were provided with copies of the coding form and related codebook, as well as rationale for their use and the focus of this project. Participants met for a half-day of training. Initial training consisted of a brief review of the coding system and the project at large, and focused on the direct and practical application of this coding system to various scenarios. The scenarios were constructed from actual CSP and MHTP documents to ensure that these scenarios closely represented formats typical of CSPs and MHTPs, so that skills generalized from the training to full coding implementation.

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans
G. Step 7. Improvement Strategies. Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, and developing and implementing system-wide improvements in care. Describe interventions designed to change behavior at an institutional, practitioner, or beneficiary level.

Describe interventions.

As previously noted, this study represents a reasonable next step in CAMHD efforts to improve the quality and utility of the service planning process. The current interventions of quarterly review for timeliness and quality of CSPs, along with public reporting and individualized feedback will be continued. The initial intervention for the baseline year of the current study will be the development and application of a reliable system for coding the congruence of service and treatment plans. Because no system currently exists, this development will be a performance improvement. If the baseline measure suggests that the coding system is not acceptably reliable, then it will be revised and a repeated measurement of reliability will be performed. If acceptable reliability is observed, then congruence between the CSP and MHTP codes will be examined. If the congruence analysis suggests that further intervention is needed, the specifics will be proposed for another study.

Because the system is proving to be reasonably reliable, a congruence analysis was performed, and the Quality of Care Committee determined that the baseline indicates a need for improvement of congruence between the CSP and the MHTP. A benchmark was established. CAMHD will implement the following interventions to improve congruence:

1) Focused feedback beginning in April 2006 on the results of this study to include a brief training module on the logic model of connecting CSP strategies with the MHTP, and how this function is a core component of coordination of care. Feedback will be targeted to :

    a. Care Coordinators

    b. Mental Health Supervisors

    c. Providers

Dissemination on the results of the study will also occur through:

    a. Posting of the results on the CAMHD website,

    b. Article in the CAMHD Newsletter

    c. Mass email to all CAMHD staff

    d. Email dissemination to provider agencies by Provider Relations Liaison

    e. Discussion in the Provider Quarterly Meeting

    f. Consultation to Provider agencies as requested

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans
2) Focus group to be conducted in June 2006 to solicit strategies to improve congruence at the field level with the role groups listed above
3) Selection of strategies based on the focus group results
4) Implementation of selected strategies July-September 2006
5) Systematic feedback to the role groups on future measurements in order to provide feedback on the most current performance data regarding congruence.
6) Remeasurement in Fall 2006 to be performed by Performance Management staff and Family Guidance Center Quality Assurance Specialists with training from the CAMHD Research and Evaluation Specialist.. Remeasurement will occur every year of the study.

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans

H. Step 8. Data analysis and interpretation of study results: Describe the data analysis process on the selected clinical or non-clinical study indicators. Include the statistical analysis techniques utilized.

To answer the first question related to the reliability with which the coding system may be applied to service planning documents, the primary data analysis involved calculation of inter-rater reliability coefficients for the treatment target and treatment practice codes. Specifically, intraclass correlation coefficients (Model 2, 1; Shrout & Fleiss, 1979) was used. This model uses a two-factor coding target by judge Analysis of Variance (ANOVA) framework and takes into account the coding target, judge, and coding target by judge interaction. This model estimates the reliability of a single judge rather than the mean of a team of judges. Although the single judge model is a more conservative than the multiple judge model, it represents the routine case where CSPs and MTHPs are reviewed by a single QAS at the regional FGC, rather than using multiple judges as supported in the more resource intensive research and evaluation context. The two additional factors of coding team and guidance center, were included in the ANOVA to control for potential confounds related to the complex rater structure across centers (i.e., coding teams varied across documents and some raters were nested within particular centers).

To answer the second question related to the congruence of treatment targets and practices across the planning documents, conditional probability analysis was used. Specifically, the conditional probability was calculated to indicate the likelihood that a treatment practice or treatment target was included in the mental health treatment plan given that it was present in the coordinated service plan. To create a simple ratio for reporting, the total number of targets (or practices) that were present in both documents was divided by the total number of targets that were present in the coordinated service plan. To further address base rate issue, kappa coefficients between documents were calculated for each specific treatment target and practice. The kappa analysis yielded results that were highly correlated with the conditional probability analysis, so only the more straightforward conditional probability analysis is reported here. For this second analysis, data from the first team of raters (i.e., those employed by CAMHD) was used.

I. Step 9. Reported Improvement: Describe any meaningful change in performance observed during baseline measurement that was demonstrated.

#1 Quantifiable Measure: Intraclass Correlation Coefficient (Model 2, 1) for Treatment Targets for Coordinated Service Plans

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance*
January 1 to December 31, 2005	*Baseline:*	1.041	1.158	.90 95% CI: .87 - .93	.70	Test that ICC (2,1) differs from zero: $F_{(61, 61)} = 19.59$, $p = 0.000$
	Remeasurement 1:					
	Remeasurement 2:					

#2 Quantifiable Measure: Intraclass Correlation Coefficient (Model 2, 1) for Treatment Targets for Mental Health Treatment Plans

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance*
January 1 to December 31, 2005	*Baseline:*	1.472	1.636	.90 95% CI: .87 - .93	.70	Test that ICC (2,1) differs from zero: $F_{(61, 61)} = 19.17$, $p = 0.000$
	Remeasurement 1:					
	Remeasurement 2:					

#3 Quantifiable Measure: Intraclass Correlation Coefficient (Model 2, 1) for Treatment Practices for Coordinated Service Plans

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance*
January 1 to December 31, 2005	*Baseline:*	.715	.881	.81 95% CI: .77 - .87	.70	Test that ICC (2,1) differs from zero: $F_{(71, 71)} = 9.51$, $p = 0.000$
	Remeasurement 1:					
	Remeasurement 2:					

#4 Quantifiable Measure: Intraclass Correlation Coefficient (Model 2, 1) for Treatment Practices for Mental Health Treatment Plans

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance*
January 1 to December 31, 2005	*Baseline:*	.872	1.068	.82 95% CI: .77 - .87	.70	Test that ICC (2,1) differs from zero: F (71, 71) = 9.81, p = 0.000
	Remeasurement 1:					
	Remeasurement 2:					

#5 Quantifiable Measure: Conditional probability that a treatment target was included in a Mental Health Treatment Plan given that it was included in the Coordinated Service Plan

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance*
January 1 to December 31, 2005	*Baseline:*	150	338	.44 95% CI: .392 - .497	.50	Test that *p* differs from benchmark: z = -2.08, p = 0.019
	Remeasurement 1:					
	Remeasurement 2:					

#6 Quantifiable Measure: Conditional probability that a treatment practice was included in a Mental Health Treatment Plan given that it was included in the Coordinated Service Plan

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance*
January 1 to December 31, 2005	*Baseline:*	136	343	.40 95% CI: .346 - .449	.50	Test that *p* differs from benchmark: z = -3.88, p = 0.0001
	Remeasurement 1:					
	Remeasurement 2:					
	Remeasurement 3:					
	Remeasurement 4:					
	Remeasurement 5:					

* If used, specify the test, p value, and specific measurements (e.g., baseline to remeasurement #1, remeasurement #1 to remeasurement #2, etc., or baseline to final remeasurement) included in the calculations.

HSAG HEALTH SERVICES ADVISORY GROUP

APPENDIX D: **The Child and Adolescent Mental Health Division's 2005-2006 Submitted Study:**
Congruence of Coordinated Service Plans and Mental Health Treatment Plans

Performance Improvement Project (PIP) Name: Congruence of Coordinated Service Plans and Mental Health Treatment Plans

J. Step 10. Sustained improvement: Describe any demonstrated improvement through repeated measurements over comparable time periods. Discuss any random year-to-year variation, population changes, and sampling error that may have occurred during the remeasurement process.

This was the first year of the current project and as such represents a measurement development and baseline establishment year. Therefore, trend analysis of sustained improvements was not relevant.

Nevertheless, all indicators of inter-rater reliability in the coding of treatment targets and treatment practices were significantly greater than zero and all parameter estimates exceeded the rationally defined benchmark of .70. This suggests that following discrete training, raters from a variety of backgrounds reliably applied the CAMHD treatment and progress coding system in the context of coordinated service plan and mental health treatment plan content reviews. This represents a significant system improvement in that it supports content review of coordinated service plan and mental health treatment plan documents using the same constructs and lexicon that is applied to monthly provider reports of treatment activities and to review of the service research literature by the Evidence-Based Services Committee. The results reported above for the QUEST population were consistent with those found for the total CAMHD population, and were also consistent with findings from the application of this coding system to the content review of mental health assessments. This preliminary step of establishing the reliability of the coding system supports the continued analysis of the coding results to determine the degree of congruence between coordinated service plan targets and practices and mental health treatment plan targets and practices.

The analysis of the congruence between Coordinated Service Plans and Mental Health Treatment Plans describe a baseline level of the degree of coordination between the system-level family service teams and the provider-specific family treatment teams in terms of treatment targets and treatment practices. Complete congruence (i.e., 100% overlap; conditional probability of 1.0) is not expected between these two documents because the Coordinated Service Plans are designed to represent a broader view of the youth and the youth's circumstances and to include both formal and informal supports. Mental Health Treatment Plans represent specific formal supports to address identified concerns. The benchmark of .50 was rationally selected to indicate that one-half of the Coordinated Service Plan targets and practices were expected to be included as a focus of treatment in formal supports across the six months following plan documentation. However, the veracity of this aggregate benchmark is unknown.

In the QUEST population reported here, analysis of the overall treatment target congruence indicated that under one-half (44%) of all targets included in the Coordinated Service Plan were addressed in Mental Health Treatment Plans. The degree of congruence between plans was somewhat lower for treatment practices (40%). These analyses generally replicated in the total CAMHD population for treatment targets (45% congruence for treatment targets), but the congruence of the treatment practices was closer to one-third (35% congruence). Thus, these findings suggest that there is most likely room for improvement in the degree of coordination between the overarching service plans and the provider-specific treatment plans.